

RTV 106 High Temperature Silicone from Momentive is a specialised, heat resistant grade of silicone sealant. This silicone has a maximum continuous operating temperature rating of 260°C and will handle short-term exposure to up to 315°C.

It is a pasty, one-part RTV silicone with an acetoxy-base (acetic cure). This industrial grade silicone exhibits excellent adhesive to a wide range of surfaces

Momentive RTV 106 Silicone (formerly known as GE RTV 106 Silicone) is a high quality, professional-grade product that has been approved or recognised by a number of certifying bodies. These include the FDA 21 CFR 177.2600, USDA, NSF International Std. No. 51 and UL File No. 36952.

[View This Product](#)

Typical Applications

- Sealing Heating Elements.
- Making High Temperature Silicone Gaskets.
- Bonding of Parts in Cooking and Catering Equipment.
- Sealing Around Heating Equipment.
- Ventilation Work.
- Pump sealing.
- Making gearbox and automotive gaskets.
- Sealing and insulating appliances and electronics.

Important

The values listed here and the information presented should not be treated as a substitute for specific technical advice. We cannot warrant the products performance or suitability for particular applications.

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Technical Details
Technical Data Sheet
swiftsupplies.com.au

Consistency / Viscosity	Paste
Viscosity	400 grams / minute
Specific Gravity	1.07
Tack-Free Time	20 Minutes
Tensile Strength ¹	26 kg/cm ²
Elongation	400%
Hardness	30 Shore A
Tear Strength	7 kg/cm
Shear Strength ²	14 kg/cm ²
Peel Strength	7 kg/cm
Electrical Properties	
Dielectric Strength	20 kv/mm
Dielectric Constant @ 60 Hz	2.8
Dissipation Factor @ 60 Hz	0.001
Volume Resistivity	3x10 ¹⁴ ohm-cm
Thermal Properties³	
Brittle Point	-60°C
Maximum Continuous Operating Temperature	260°C
Maximum Short-Term Operating Temperature	315°C
Additional Information³	
Linear Shrinkage	1%
Thermal Conductivity	0.0005 cal/sec/cm ²

All values measured after 3 days cure at 25°C with 50% relative humidity.

- (1) At 100% cohesive failure.
- (2) At 100% cohesive failure using a 1" x 8" stainless steel screen at 180° pull angle.
- (3) Information is provided for convenience only. These properties are not tested on a routine basis.

Please Note

These silicones were not designed for and should not be used for applications intended for permanent implantation into the human body. These silicones are not for use in delicate electrical and electronic applications in which the corrosion of copper, brass or other sensitive metals is undesirable.

Specifications
FDA

RTV 106 sealant can be used in food contact applications where FDA regulations apply.

USDA

RTV 106 sealants may be used on equipment which may contact edible products in official establishments operating under the Federal meat and poultry products inspection program. See USDA letter of Authorization.

NSF International Status

NSF lists RTV 106 sealants under NSF International Standard No. 51 (Plastic Materials and Components for Use in Food Equipment), as satisfactory for use on food contact surfaces.

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UL Status

RTV 106 silicone rubber adhesive sealants are recognized by Underwriters Laboratories, Inc., under their Component Recognition Program (UL File No. E-36952).

Military Specification

MIL-A-46106

Group 1 – Type 3 – High Temperature Paste: RTV 106.

Testing for referenced MIL Spec is performed in accordance with current Momentive Performance Materials quality test methods, laboratory conditions, and procedures, frequency and sampling, which are not necessarily identical with the methods, conditions, procedures, frequency and sampling stated or referenced in the listed specification. Any certification will be limited to listed properties and will not imply or state conformity to any other aspect of the referenced specification, including but not limited to marking, packaging, bar coding, testing, or sampling. Contact Momentive Performance Materials for a comparison review.

Surface Preparation

Surfaces must be clean, dry and free of dirt, grease, oil, rust and water. Do not use soap or detergent for this.

All RTV 100 Series Silicones (including RTV 106 as well as RTV 102, RTV 103, RTV 108 and RTV 109) will bond to many clean surfaces without the aid of primers. These surfaces typically include many metals, glass, ceramic, silicone rubber and some rigid plastics.

These adhesive sealant products will also produce fair bonds to organic rubber and to some flexible plastics not containing fugitive plasticizers (which migrate to the surface, impairing adhesion). An evaluation should be made to determine bond strength for each specific application. For difficult-to-bond substrates, use of a primer is suggested. Primers

Application Time and Cure Cycle

Cut nozzle at 45° angle to desired bead width and apply to substrate with a caulking gun.

These silicones may be applied directly to clean or primed substrates. Where broad surfaces are to be mated, the sealant should be applied in a thin, less than 6mm (1/4 in.) diameter, bead or ribbon around the edge of the surface to be bonded.

Higher temperatures and humidity will accelerate the cure process low temperatures and low humidity will slow the cure rate. As the adhesive sealant cures, acetic acid vapours are released from the sealant surface. The odour of acetic acid will completely disappear when curing is completed.

A 3mm (1/8 in.) section of adhesive sealant will cure through in approximately 24 hours at 25°C (77°F) and 50% R.H. Since cure time increases with thickness, use of these adhesive sealants should be limited to section thicknesses of 6mm (1/4 in.) or less.

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In addition to the effects of temperature and relative humidity, development of maximum bond strength will depend on joint configuration, degree of confinement, sealant thickness and substrate porosity. Normally, sufficient bond strength will develop in 12 to 24 hours to permit handling of parts. Minimum stress should be applied to the bonded joint until full adhesive strength is developed. Eventually the adhesive strength of the bond will exceed the cohesive strength of the silicone rubber sealant itself. Always allow maximum cure time available for best results.

Health and Safety

This product will emit acetic acid while curing. Use only in well ventilated areas and avoid breathing in vapour. Avoid contact with skin, eyes and mouth. Please do consult the associated Safety Data Sheet before use for further information and instruction.

Limitations

Contractors Silicone is not recommended for use with concrete, marble, galvanised steel, lead surfaces or for fixing mirrors without the manufacturers approval. Do not use on submerged joints where porous substrates permit water to the bond interface. Do not use for aquarium manufacturing. This grade cannot be painted as paint will not adhere to it. If using with laminated glass or certain grades of rubber, care should be taken to ensure that bleeding of the plasticiser will not occur.

Shelf Life

Minimum shelf life is 12 months if stored in a cool dry place. Storage temperature should not exceed 25°C as this will limit the shelf life.

Available Sizes and Colours

Momentive RTV 106 Series Silicone is available from Swift Supplies Online in red only.

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